

Optional:

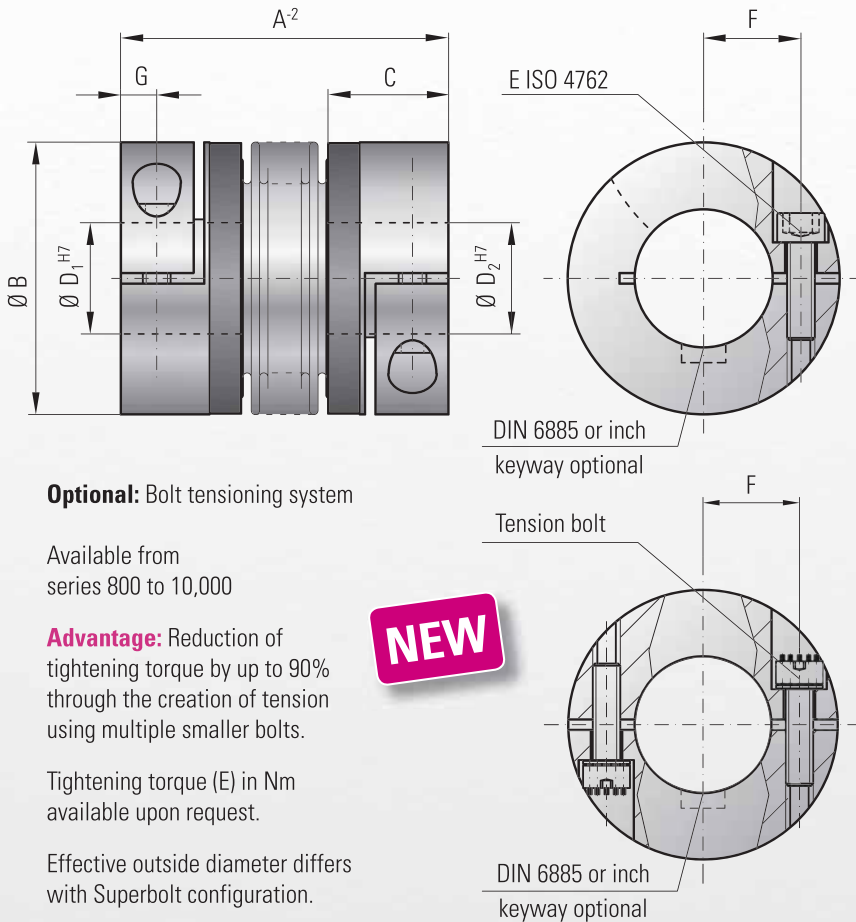


MODEL BK2

BACKLASH-FREE, TORSIONALLY STIFF METAL BELLOWS COUPLINGS



with clamping hubs



Optional: Bolt tensioning system

Available from series 800 to 10,000

Advantage: Reduction of tightening torque by up to 90% through the creation of tension using multiple smaller bolts.

Tightening torque (E) in Nm available upon request.

Effective outside diameter differs with Superbolt configuration.

Features:

- easy to mount
- multiple lengths available
- low moment of inertia

Material:

Bellows made from highly flexible, high grade stainless steel; see below for hub material

Design:

With a single ISO 4762 radial clamping screw per hub. Series 800 and up with two clamping screws 180 degrees opposed

Absolutely backlash free due to frictional clamp connection

Temperature range:

-30 to +100° C (-22 to +212° F)

Speeds:

Up to 10,000 rpm; in excess of 10,000 rpm with finely balanced version (up to G = 2.5)

Service life:

Maintenance free with infinite life when operated within the technical specifications

Brief overloads:

Acceptable up to 1.5x the rated torque

Fit tolerance:

Overall clearance between hub and shaft 0.01-0.05 mm

Non standard applications:

Custom designs with various tolerances, keyways, materials, dimensions, etc. available upon request

Model BK 2		Series																																						
		15			30			60			80			150			200			300			500			800			1500			4000			6000			10000		
Rated torque (Nm)	T _{KN}	15			30			60			80			150			200			300			500			800			1500			4000			6000			10000		
Overall length (mm)	A ²	59	66	99	69	77	113	83	93	130	94	106	143	95	107	144	105	117	163	111	125	200	133	146	169	140	179	166	230	225	252	288								
Outside diameter (mm)	B	49			55			66			81			81			90			110			124			134			157			200			253			303		
Fit length (mm)	C	22			27			31			36			36			41			43			51			45			55			85			107			129		
Inside diameter possible from Ø to Ø H7 (mm)	D ₁ /D ₂	8-28			10-30			12-35			14-42			19-42			22-45			24-60			35-60			40-75			50-80			50-90			60-140			70-180		
Fastening screw ISO 4762	E	M5			M6			M8			M10			M10			M12			M12			M16			2xM16			2xM20			2xM24			2xM24			2xM30		
Tightening torque of the fastening screw (Nm)	E	8			15			40			50			70			120			130			200			250			470			1200			1200			2400		
Distance between centerlines (mm)	F	17			19			23			27			27			31			39			41			2x48			2x55			65			90			117		
Distance (mm)	G	6.5			7.5			9.5			11			11			12.5			13			16.5			18			22.5			28			35			42		
Moment of inertia (10 ⁻³ kgm ²)	J _{ges}	0.06	0.07	0.08	0.12	0.13	0.14	0.32	0.35	0.4	0.8	0.85	0.9	1.9	2	2.1	3.2	3.4	3.6	7.6	7.9	8.3	14.3	14.6	14.8	16.2	17	43	45	165	495	1214								
Hub material		Al optional steel			Al optional steel			Al optional steel			Al optional steel			steel optional Al			steel optional Al			steel optional Al			steel optional Al			steel			steel			steel			steel			steel		
Approximate weight (kg)		0.16			0.26			0.48			0.8			1.85			2.65			4			6.3			5.7			11.5			28.8			49.4			80.9		
Torsional stiffness (10 ⁹ Nm/rad)	C _T	20	15	14	39	28	27	76	55	54	129	85	84	175	110	97	191	140	135	450	350	340	510	500	400	780	711	1304	1180	3400	5700	10950								
Axial ± (mm)	Max. values	1	2	3	1	2	3	1.5	2	3	2	3	4	2	3	4	2	3	4	2.5	3.5	4.5	2.5	3.5	4.5	3.5	4.5	3.5	4.5	3.5	4.5	3.5	4.5	3	3					
Lateral ± (mm)		0.15	0.2	1	0.2	0.25	1	0.2	0.25	1	0.2	0.25	1	0.2	0.25	1	0.25	0.3	1	0.25	0.3	1	0.3	0.35	1	0.35	1	0.35	1	0.4	0.4	0.4	0.4							
Angular ± (degree)		1	1.5	2	1	1.5	2	1	1.5	2	1	1.5	2	1	1.5	2	1	1.5	2	1	1.5	2	1	1.5	2	1.5	2	1.5	2	1.5	2	1.5	1.5	1.5	1.5					
Axial spring stiffness (N/mm)	C _a	25	15	84	50	30	118	72	48	165	48	32	144	82	52	130	90	60	280	105	71	605	70	48	85	100	285	320	440	565	1030	985								
Lateral spring stiffness (N/mm)	C _r	475	137	140	900	270	224	1200	420	337	920	290	401	1550	435	500	2040	610	750	3750	1050	1200	2500	840	614	2000	1490	3600	1700	6070	19200	21800								

* 1 Nm = 8.85 in lbs